



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PCT 2237		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/AT 03/00203	International filing date (day/month/year) 03.04.2003	Priority date (day/month/year) 10.06.2002	
International Patent Classification (IPC) or both national classification and IPC A63B22/06			
Applicant SOLINAS, Gianpietro			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 38.</p> <p>2. This REPORT consists of a total of 4 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 4 sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 30.12.2003		Date of completion of this report 02.09.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523858 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Lundblad, H Telephone No. +49 89 2399-8190 	

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. **PCT/IT 03/00203**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-15 as originally filed

Claims, Numbers

1-9 received on 20.08.2004 with letter of 09.08.2004

Drawings, Sheets

1/4-4/4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-9
	No: Claims	
Inventive step (IS)	Yes: Claims	1-9
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-9
	No: Claims	

2. Citations and explanations

see separate sheet

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EXAMINATION REPORT - SEPARATE SHEET

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following document:

D1: US-A-5 544 906

The document D1 is regarded as being the closest prior art to the subject-matter of claim 1, and shows (the references in parentheses applying to this document):
a human powered mobile means, where it comprises a main frame and at least one modular element connected to said frame.

The subject-matter of claim 1 differs from this known mobile means in that the modular element is adapted to accomodate at least one person and is provided with ergonomic operating means nad is connected to said frame with reversible quick coupling means.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as making the mobile means more flexible in the way of use.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:
in document D1 the power element remained the same and the guiding system (wheels, skis, keel) was changed. It is nowhere disclosed to have modular (human) power elements. The man skilled in the art would not without an inventive step consider making this part modular.

Claims 2-9 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

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1. A human-powered mobile means, characterized in that it comprises a main frame (2) and at least one modular element (1a-1e), said modular element (1a-1e) being adapted to accommodate at least one user, provided with ergonomic operating means, and connectable to said frame (2) by means of reversible, quick coupling means (4, 5, 8, 9), thus being interchangeable with further modular elements (1a-1e).

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CLAIMS

SEE PAGE 15A

1. A modular system for realizing mobile means or static machines operated by human muscular strength, characterized in that it comprises modular elements (1a-1e) provided with ergonomic operating means for use by one or more persons, and a main frame (2) in which said modular elements may be selectively connected to said main frame, singularly or in a plurality, by means of reversible quick hooking means.
2. A ^{mobile means} ~~modular system~~ according to claim 1, characterized in that said reversible quick ^{coupling} ~~hooking~~ means comprise linear guides (5) fixed to said main frame (2) and trolleys (4) sliding along said guides (5), associated to said modular elements (1a-1e).
3. A ^{mobile means} ~~modular system~~ according to claim ² ~~1~~, characterized in that said linear guides (5) comprise a plurality of references (8) adapted to cooperate with blocking means (9) associated to said trolleys (4), for determining blocking positions univocally selectable for said trolleys (4).
4. A ^{mobile means} ~~modular system~~ according to claim 1, characterized in that said reversible quick ^{coupling} ~~hooking~~ means comprise at least one housing (10) associated to said main frame (2), for the insertion of a base (11) associated to said modular elements

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(1a-1e), and that may be blocked in position inside said housing (10).

mobile means

- 5 5. A ~~modular system~~ according to claim 1, *characterized in that*
~~devices for absorbing mechanical energy (30, 31)~~ are
 associated to said main frame (2). *propulsion means (30)*

mobile means

- 10 6. A ~~modular system~~ according to claims 1 ~~and 5~~, *characterized*
in that said main frame (2) and said modular elements (1a-
 1e) comprise transmission means (40, 41) that may be
 reversibly connected one to the other, and that may connect
 the ergonomic operating means associated to the modular
 elements (1a-1e), to the ~~absorbing devices (30, 31)~~ associated
 to the main frame (2). *propulsion means (30)*

15 *mobile means*

7. A ~~modular system~~ according to claim 1, *characterized in that*
 said modular elements (1a-1e) comprise ~~devices (30)~~ *propulsion*
~~absorbing mechanical energy~~, mechanically connected to the
 operating means associated to said modular elements.

20 *< mobile means according to claim 1 and for use as a >*

8. A human powered boat, characterized in that ~~it comprises a~~
~~modular system according to one or more of the preceding~~
~~claims, wherein~~ said main frame (2) comprises hulls (50a,
 50b) connected by beams (52) for supporting at least one
 25 frame (53) to which reversible quick hooking means (5, 10)
 for said modular elements (1a-1e) are associated.

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<mobile means according to claim 1 and for use as a>

9. A human powered boat, *characterized in that it comprises a*
modular system according to one or more of the preceding
claims, wherein said main frame (2) comprises hulls (50a,
5 50b) connected by a platform (51) comprising said reversible
quick hooking means (5, 10) for said modular elements (1a-
1e).
10. A mobile mean or a static machine operated by human
10 muscular strength, for training, physical exercise or
recreational use, *characterized in that it comprises a modular*
system according to one or more of the preceding claims.